(19) World Intellectual Property Organization

International Bureau



1 (1881) BINGER IN BERNE HER BERN BEIN BERN 1811 IN 18 BERN 1818 HERE HERE HINE BEN BERNE HER HER HER HER HER

(43) International Publication Date 1 September 2005 (01.09.2005)

PCT

(10) International Publication Number WO 2005/081239 A1

(51) International Patent Classification⁷: C09B 57/10, 55/00, C07D 277/42

G11B 7/24,

(21) International Application Number:

PCT/EP2005/050670

(22) International Filing Date: 16 February 2005 (16.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: PCT/EP2004/050185

04103948.8

23 February 2004 (23.02.2004) EP 18 August 2004 (18.08.2004) EP

(71) Applicant (for all designated States except US): CIBA SPECIALTY CHEMICALS HOLDING INC. [CH/CH]; Klybeckstrasse 141, CH-4057 Basel (CH).

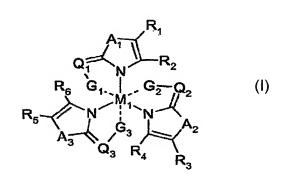
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): TAKAHASHI, Ryuichi [JP/JP]; 1-4-6, Kanokodai Kita-machi, Kobe, Hyogo 651-1513 (JP). KUNIMOTO, Kazuhiko [JP/JP];

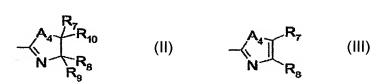
2-27-12, Keyakizaka, Kawahishi-shi, Hyogo 666-0145 (JP). **SUTTER, Peter** [CH/CH]; Seemättlistrasse 14/2, CH-4132 Muttenz (CH). **LEHMANN, Urs** [CH/CH]; Unterer Rheinweg 50, CH-4057 Basel (CH).

- (74) Common Representative: CIBA SPECIALTY CHEMICALS HOLDING INC.; Patent Department, Klybeckstrasse 141, CH-4057 Basel (CH).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

[Continued on next page]

(54) Title: OPTICAL RECORDING MATERIALS HAVING HIGH STORAGE DENSITY





(57) Abstract: The invention relates to an optical recording medium comprising a substrate, a reflecting layer and a recording layer comprising a compound of formula (I) or a tautomer thereof, wherein G₁, G₂ and G₃ are each independently of the other A₁, A₂ and A₃ are each independently of the other $N(R_{14})$, O, S or Se and A_4 is $C(C_1-C_5aIky1)2$, $C(C_4-C_5alkylene)$, $N(R_{14})$, O, S, Se, $N=C(R_{15})$ or CH=C(R₁₆); M₁ is an at least trivalent metal of groups 3 to 15 most preferred Co(III) or Cr(III); Q₁, Q₂ and Q₃ are each independently of the other C(R₁₇), N or P. Recording and playback are effected especially at a wavelength of from 350 to 500 nm, for example using a

blue laser.



WO 2005/081239 A1



FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

 before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.